



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,930	12/23/2003	Jae Bum Kim	8733.997.00-US	9687
30827	7590	04/04/2006	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006				PENG, CHARLIE YU
ART UNIT		PAPER NUMBER		
		2883		

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No.	Applicant(s)
	10/742,930	KIM, JAE BUM
	Examiner Charlie Peng	Art Unit 2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 January 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 9-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 13-15 is/are allowed.
- 6) Claim(s) 9-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to amended claim 9 have been considered but are moot in view of the new ground(s) of rejection. Applicant's main argument appears to be that previously cited reference do not teach optical fibers separately surrounding a light source and that this feature can be found in Figs. 3, 10 & 11 of the applied Kim et al. reference. (See 35 U.S.C. 103(a) rejection for specific details.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2004/0022050 to Yamashita et al. in view of U.S. Patent 6,714,185 to Kim et al. Yamashita teaches, in a first embodiment illustrated in **Fig. 5**, a light source device having a light guiding plate **6**, two primary light sources **1** on both sides of the light guiding plate, and a reflecting plate **7** below the light guiding plate. Yamashita further teaches, in a second embodiment illustrated in **Fig. 13**, a primary light source arrangement where light from one LED **30** (a light source) is converted by an plastic optical fiber array **32**, which then makes the light incident on the light guiding plate **6**. ([0148]) The light source can be a self-emitting light source such as a cold-cathode tube, a fluorescent tube, an LED or an LED array. ([0082]) Yamashita teaches using

optical fibers to couple light from the light source(s) but does not specifically state that the fibers separately surround the circumference of the light source(s). However, such a technique is well known in the art. Kim teaches an LCD display having a light source for generating backlight, a plurality of optical fibers, wherein the optical fibers **62** are optically connected with the light source **61**. The optical fibers **62** separately surround the light source **61**, and the ends of the optical fibers are surrounded by reflector **91**.

(See Fig. 3, 10 & 11 and description)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Yamashita with the features found in the Kim et al. reference for the motivation of uniformly and effectively supplying light to each pixel line of an entire LCD panel using the optical fibers.

Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Yamashita et al. and Kim et al. as applied to claim 9 above, and further in view of U.S. Patent 5,252,733 to Norman et al. Yamashita and Kim teach the backlight unit except for a particular type of glass that is used to create the optical fiber. Glass and plastic are two known materials used to mass-manufacture optical fibers. Norman et al. teach a usage of fluoride glass optical fibers. (**Column 1, lines 10-39**) It would have been obvious to one having ordinary skill in the art at the time the invention was made to use fluoride glass optical fibers, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. The motivation would be to use the fluoride glasses as high transmittance optical fibers.

Allowable Subject Matter

Claims 13-15 remain allowed for reasons indicated in the previous office action.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlie Peng whose telephone number is (571) 272-2177. The examiner can normally be reached on 9 am - 6 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BRIAN HEALY
PRIMARY EXAMINER
ART UNIT 2883